



H.E.F. CANADA QUARTERLY

The Human Ecology Foundation of Canada

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THE HUMAN ECOLOGY FOUNDATION OF CANADA

The H.E.F. Canada Quarterly

The HEF Canada Quarterly is a publication of The Human Ecology Foundation of Canada, a charitable organization under Canadian Law, operating on a non-profit basis. The Quarterly is for people who are interested in health and its relation to our environment. It deals primarily with research in the field of clinical ecology (environmental medicine), and also describes how people have improved their health by changes in habits, diet, and environment. As such, it does not offer medical advice, and we urge persons wishing to experiment with changes in their lifestyle to do so with the help and guidance of a knowledgeable physician.

The Human Ecology Foundation of Canada

One of the purposes of the Human Ecology Foundation is to promote the free exchange of information on the prevention and treatment of ecological illness. People who are ecologically ill are no longer able to adapt well to common and increasing exposures in their everyday environment. They may develop a variety of chronic or acute symptoms that are brought on by substances in the air, in food, or in water.

Natural inhalants such as pollens, dust and moulds, and even natural foods may begin to affect people adversely. This aspect of the condition is often referred to as "allergy", but the many synthetic chemicals that are now common around us can also cause symptoms, and overexposure to these can trigger ecological illness even in those with no history of allergy or other sensitivity to the environment. Symptoms may be mild and merely annoying, or they may become severe enough to interfere with a person's daily activities, family life, and career.

On a local basis, HEF Branches work toward finding sources of chemically less-contaminated food, water, clothing, and household furnishings, as well as providing counselling on changes of lifestyle that may alleviate symptoms. The Foundation and all its branches would like to encourage others to become involved not only in research on the effects of environment on health, but in working toward a healthier, less-polluted environment.

Subscription and Membership

Membership in the Foundation includes a subscription to the HEF Canada Quarterly which is produced four times per year. Annual membership and subscription fee is \$ 20.00. WE WANT NEW MEMBERS!

P R E S I D E N T ' S M E S S A G E

An expression of thanks for your support is extended to all members. These past two years have been memorable for me--some events I would prefer to forget, such as my school being painted in December 1983, and pesticides being sprayed both indoors and out in 1984.

However other happenings were like stepping stones in our quest for the recognition of environmental illness as a disease of the twentieth century:

- The Ontario Ministry of Health Committee studying "Environmental Hypersensitivity Disorders"
- The Toronto Public School Board study of "Pollution Problems in the Schools"
- The Ontario English Catholic Teachers Association Task Force looking at the school pollution
- Kitchener-Waterloo School Boards providing some accommodation for environmentally sensitive students
- The successful conference held in Toronto on April 13, 1985
- The presentation to Dr. John MacLennan of a plaque of appreciation for many years of dedicated service.

These events will remain as positive memories.

Now that the seeds of information have been planted, nurturing and growth are essential. By continuing to work in unity sharing with and caring for each other, positive results should be on the horizon.

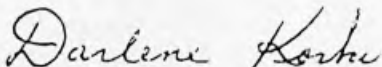
The Board of Directors will have added dimensions with our new directors. Welcome to you. And to our new national President, Lynda Brooks, I wish good health. Her energies will be used productively in the advancement and growth of the education in our society at large. Confidence in Lynda's ability to continue the task is based on her positive involvement with the Ottawa Branch.

Remember: If we keep as one,
 Our battle can be won.

My involvement with the Foundation continues now as Past President and Conference Co-ordinator for 1986. A Conference update will be included in each Quarterly starting in September. Time and location will be announced.

Thank you for the opportunity to have worked with a fine group of people.

Ecologically yours,



Darlene Koski
Past President
Human Ecology Foundation of Canada

LOOKING BACK

(Editor's Note: The following excerpt is taken from Vol. 4, No. 4, Fall 1981:
'Helpful Hints From Hawaii' by Marna Slocum.)

Obstacles To Health

The greatest problem is a closed mind (some call it the self-denial stage). This is an obstacle every chemically sensitive patient has to recognize, accept, and act upon in order to gain control of his allergies and in fact, his life.

One of our strongest assets is motivation. You WILL find a way to stay well - the right way for you. If you acquire the best information available and act upon it, you will improve in the way that is right for you.

We have all seen the patient with a closed mind and/or lack of motivation, and heard at least some of the following statements:

"Oh yes, I have chemical allergies but I am not allergic to food," or
"I am not going to let allergies control my life" (they do unless you can stay 'clear') or

"I am going to live in town where it is convenient even if the air is badly polluted," or

(after having gone to three of the top ecological clinics) "I think I will try another clinic," (they are looking for answers that at this time do not exist and cannot accept the facts as they are, not to mention act on them), or

"Oh yes, I am on a rotation diet, but I will have a third helping, it's organic".

Only when you know the fallacy of the above remarks and real inherent danger of such blindness, and start to get used to the truth will you become one of the FEW who can and do control their allergies.

Sure, there are exposures that are out of our control, but think about it - not many. Most exposures with knowledge and motivation can be avoided, or at least you can cut down the severity of the attacks and cut down on the time it takes to clear from them.

Now come the excuses - I must have heard most of them, but it all gets down to priority. What do you want and how much do you want it? If you truly want most in the world to get well and feel good and function well, then knowledge and motivation can be the key to your goal and you CAN attain your goal if you really want to.

Start by making it number one always. The only thing that makes it all

worth it is feeling good. To me feeling good makes it worth it - worth it to me, worth it to my loved ones, and without health you really have nothing. You can not function, can not give, and are not really alive. Start today - and remember today is the first day of the rest of your life, so make it count.

With ecological illness as with others there are stages. One stage to be alerted against is the stage when you are too brain-fagged to comprehend, too embarrassed to ask questions, or too much in a rut of daily routine or too lacking in initiative to make any major changes or decisions.

The key for many to be able to get through this stage is motivation and knowledge. There is an old saying - "Success is 10% I.Q. and 90% I will." It is often true, so be forewarned.

Do sense of values need updating? After patients are diagnosed chemically sensitive, values and goals need to be reset or at least altered. The truth is not always easier to accept but if it comes to getting rid of an unwashed old feather pillow or waking with a hard-to-breathe through nose, or holding onto handy-to-use plastic items or fatigue that does not go away, I know what my decision would be and has been.

What amazes me is how difficult it is for some people to make such decisions. To me feeling good makes it all worth it. If it isn't to you, perhaps you should re-examine your values, in order to get well.

* * *

(Editor's Note: 'Second Time Around' thanks to Marna Slocum of Honolulu, Hawaii.)

OLD FRENCH PROVERB

"La maladie enseigne ce que nous sommes."

"Our sickness teaches us what we are."

ALLERGY ALERT

Food Hypersensitivity Made Life-Threatening by Ingestion of Acetylsalicylic Acid (ASA) by Ruby E. Naujoks, Pharm. D

Hypersensitivity reactions induced by foods such as almonds, peanuts, shellfish or certain berries are not uncommon in man. These reactions vary in severity and clinical manifestations and are most commonly associated with gastro-intestinal symptoms such as abdominal pain, vomiting and diarrhea; skin manifestations such as urticaria and exacerbation of eczema; respiratory symptoms such as wheezing and rhinorrhea; or a combination of all. The onset of the clinical syndrome may be either immediate (seconds or hours) or delayed (hours to days) and for most reactions, sensitization requires contact between the immune system and an antigen. (1)

In food allergy, the dietary antigens are usually absorbed as macromolecules such as proteins or polypeptides with molecular weights greater than 3,000, although smaller non-protein molecules such as tartrazine (molecular weight 540) have also been associated with food allergy. Depending on the molecule, the antigen may either be absorbed through the cell membrane or between the cells. (2)

Concomitant ingestion of acetylsalicylic acid with food allergens has been shown, in experimental animals, to potentiate the hypersensitivity reactions. (3, 4) This phenomenon had not been demonstrated in man until the British Medical Journal (5) recently reported the case of a fourteen year old boy with a known hypersensitivity to peanuts. Clinical features of the reaction were mild with

tingling and dryness of the lips and mouth starting within seconds after ingestion of peanuts, followed by swelling of the lips and face with a sensation of choking in the throat. The reaction would always subside within five minutes. The boy had previously consumed acetylsalicylic acid on a number of occasions without adverse effects.

On the day of admission, the boy took two 300 mg tablets of acetylsalicylic acid for a headache. Five minutes later he ate a piece of cake containing peanuts. The boy suffered his usual reaction to peanuts which subsided within five minutes. Thirty minutes later he experienced generalized pruritis, a choking sensation and extreme shortness of breath followed by collapse. Upon arrival at the hospital, the boy was unconscious with an abnormal EKG and covered with an urticarial rash. Following emergency resuscitative procedures, he made a rapid recovery, becoming completely asymptomatic 45 minutes after admission.

The mechanism of this potentiated reaction is not known although the pharmacologic literature suggests that acetylsalicylic acid changes the permeability of the gastric mucosa, increasing the penetration of macromolecules which are large enough to be antigenic. (3, 4)

The authors suggest that persons suffering from even mild immediate hypersensitivity reactions to food should be warned that concomitant ingestion of acetylsalicylic acid with the offending allergen could result in a dangerous reaction.

- (1) Parker, C.W. (ed.) *Clinical Immunology* (Vol. 11) 1980. W.B. Saunders Co. Toronto.
- (2) DuMont, G.C.L., Beach, R.C., Menzies, I.J.: Gastrointestinal permeability in food-allergic eczematous patients, *Clinical Allergy* 14(1): 55-59, 1984.
- (3) Flemstrom, G., Marsden, N.V.B.: Dextran permeability, electrical properties, and H^+ secretion in isolated frog gastric mucosa after acetylsalicylic acid. *Gastroenterology* 64:278-284; 1973.
- (4) Flemstrom, G., Marsden, N.V.B.: Increased inulin absorption from the cat stomach exposed to acetylsalicylic acid. *Acta Physiol. Scand.* 92:517-525; 1974.
- (5) Cart, A.J.: Food hypersensitivity made life-threatening by ingestion of

* * *

Dr. R. E. Naujoks is Assistant Professor at the Faculty of Pharmacy, University of Manitoba, in Winnipeg. We are grateful for her permission to reprint this article, which first appeared in Vol. 10, No. 5 of 'Communication', published by the Manitoba Society of Professional Pharmacists Inc. Physicians and pharmacists are urged to pass this information on to their colleagues.

* * *

Editor's Note: F.Y.I. (For Your Information), in January of 1985, a new U. S. study conducted by the Centres for Disease Control found "overwhelming evidence" of a link between ASA (acetylsalicylic acid or aspirin) and Reye's Syndrome in children. ASA is designated as a Non-Steroidal Anti-inflammatory Drug (NSAID) whose activity is comparable with the cortisone group of drugs but lacks their side-effects. It is considered "the drug of choice" for the treatment of rheumatoid arthritis, and is frequently used in combination with an antibiotic for the treatment of rheumatic fever. According to the John Wiley & Sons textbook 'Basic Organic Chemistry, Part 5, Industrial Products' (page 393), ASA is synthesized from phenol. For further information on acetylsalicylic acid, readers are advised to consult the following easily-available paperback books:

- (a) Complete Guide To Prescription & Non-Prescription Drugs (HP Books) by H. Winter Griffith, M.D.; Aspirin, pages 64 and 65.
- (b) The Essential Guide To Prescription Drugs (Fitzhenny & Whiteside) by James W. Long, M.D.; Aspirin, pages 72 to 77.
- (c) The Pill Book, 2nd Edition (Bantam Books); Aspirin, pages 53-55.

ENVIRONMENTAL MEDICINE

PART ONE: excerpted from 'Ecological Illness: Maladaptation To The Environment'

Maladaptation To Chemicals

by W. J. Rea, M.D., P.A.

The chemicals in our modern lives are often the biggest and most stressful part of our bodies' environmental load. In the first place, pure foods themselves are nothing more than chemicals foreign to the body. The proteins, fats, and carbohydrates that make up foods are complex chemicals. Furthermore, you may be surprised to learn that ethanol (alcohol) is one of the many chemicals which naturally make up oil of orange; and phenols are normal constituents of a wide variety of the plants we use for food, as well as of milk. As we know, many patients are made ill just by the "natural" chemicals that we usually think of by their common names - that is, "corn" or "wheat" or "beef" or "eggs".

To that natural load of chemicals, food growers add insecticide residues; and food processors add thousands of man-made chemicals, including artificial colors and flavors, preservatives, bleaches, thickeners and stabilizers. Ordinary table salt usually includes a lot more than just salt - it may also have added iodide, sodium silico aluminate (anticaking agent), and dextrose (corn sugar). A popular snack cake contains sugar, flour, eggs, shortening, corn sugar, whey, nonfat dry milk, soy flour, mono- and diglycerides, leavening, corn syrup, starch, salt, artificial flavors and color, and sorbic acid. A typical hot dog might include beef, water, corn syrup, salt, dextrose, flavorings, smoke flavorings, monosodium glutamate, erythorbate, sodium nitrite, and sodium nitrate. Corn flakes for breakfast bring in not only corn and added

vitamins, but also sugar, salt, malt flavoring, BHA and BHT (butylated hydroxy-anisole and butylated hydroxytoluene, "freshness preservers" and solvents). For the person who is susceptible to ecologic illness, every meal adds a sizable load of natural and artificial chemicals which, taken together, require a great deal of adaptation by the body.

In addition to those chemicals that we directly ingest in our food every day, we now breathe and come into contact with many other chemicals to which our biological ancestors never had to adapt. Before we ever get out the door of our home to breathe the outdoor smog, our bodies are daily bombarded by thousands of indoor chemicals. The list below covers only some of those items commonly found in the home and able to cause adverse ecologic reactions in the susceptible patients:

gas stove	synthetic, stain-resistant carpets
heating system (esp. warm air)	fungicide-treated wallpaper
gas clothes dryer	paint fumes, turpentine
leaking refrigerant gas	furniture polish
dish detergent	floor cleaners, waxes
scouring powder	tobacco smoke
oven cleaner	vinyl plastic tablecloths, shower curtain
window cleaner	treated synthetic curtains
ammonias	plastic-covered mattresses
room air deodorizers	flame-proofed mattresses
no-pest strips	sponge rubber mattresses
insecticide sprays	rubber-backed carpets
mothballs and crystals	sponge rubber pads in upholstery
moth-proofed shelf paper	electric blankets (heated plastic wires)
recently dry-cleaned clothes	stain-proofed furniture fabrics
Lysol and other disinfectants	sheets, pillowcases, blankets of syn-
toothpaste	thetic fibers (e.g. dacron, polyester,
mouthwash	nylon, rayon, etc.)
perfumes, aftershave	synthetic fiber clothing
deodorants, antiperspirants	permanent-press plasticized clothing
aerosols of any sort	nail polish
cosmetics	hair spray
shaving cream	scented soaps, shampoos

soft plastic food bags & wraps

Teflon-lined pots & pans

tin cans with phenol lining

food additives

smokes from frying foods

laundry detergent

felt-tip pens

chlorinated, fluoridated tap water

dyes in clothing

soft plastic food storage containers

Aluminum pots & pans

heat-sealed soft plastic meat packages

charcoal formed by broiling foods

bleaches

newspaper ink, solvent

car exhaust fumes from attached garage

Maladaptation to environmental chemicals can cause the same physical and behavioral symptoms as can food maladaptation. As in the case of offending foods, an isolated acute reaction to a chemical (e.g. a headache while painting a table) is easier to spot than are the everyday indoor and outdoor chemicals to which the chronically ill patient is constantly exposed. Particularly in the case of chemicals, the diagnosis involves the total avoidance of the suspected item followed by an isolated challenge exposure to see whether or not an acute flare-up of symptoms follows. Chemical sensitivities are often multiple. Treatment, though difficult at times, consists of avoidance as much as possible. This means that the patient must create as ecologically safe an environment for him - or her - self as possible at home and at work. The guiding principle again is to keep the total load of offenders and potential offenders as low as possible in order to recover and to be better able to tolerate other stresses which cannot always be avoided.

When first confronted with this flood of information about diet and environment, your impulse might be dismay at the scope and complexity of the problem. True, the problem is complex; but, fortunately, as an ecology patient, you have only to be concerned with simplicity itself. Your goal should be to eliminate those huge lists of chemicals from your life and to simplify your environmental stresses until you - not your environment - are in control of your health. Then, over time, you may be able to rebuild a more complex life-style as your body regains its adaptability.

In the beginning, you may want to concentrate on avoiding all offending items. With a chemical problem it is crucial that you be comprehensive and complete in your avoidance; as in the case of foods, a single offending chemical

can cause the same chronic symptoms as can 20 chemicals. Remember - it is a good sign if you can make your symptoms better or worse when you manipulate your diet and environment. It suggests that ecologic factors are playing a role in your illness. Every acute adverse reaction serves as a valuable clue for you to eliminate the offending item in order that you will not have to suffer unexplained chronic symptoms from that offender ever again. Keep at it until you have eliminated every possible offender.

There are certain areas over which a chemically-sensitive patient has most control - his foods, personal hygiene and clothing, and the home environment. Controlling these areas adequately may lower the load enough that he can tolerate a less-than-optimal environment elsewhere, especially in stores, traffic, or work. The same principals of avoidance apply to chemical exposures other than those discussed here. One useful rule to follow is - if it smells, avoid it. Also keep in mind that what is safe for one allergy or ecology patient may be dangerous for another. Often products advertised as "Hypoallergenic" still contain chemicals which can cause reactions in some chemically-sensitive patients. Thus, another useful rule is - if you can live without it, avoid it, and give your body time to heal with less stress.

You, the patient, are in the best position of all to observe your symptoms and to decide what food and chemicals are giving you problems. In order to help yourself, you must observe yourself carefully and record what is going on. During the diagnosis period, you have got a lot to learn from your body. Every ecology patient is unique - he or she has a particular pattern of symptoms and set of offending items. The best way to track down the offenders is to keep a spiral notebook diary of your diet, your environment as you go about your everyday life, and the symptoms you experience. Record the times of meals and symptoms and use the observations to pick out causative agents. This diary will also give your doctor valuable clues to help you work out the problem items.

When You Are Having An Acute Reaction:

When you realize you are reacting, do something about it! You may become discouraged or confused when you react, and you will need some pre-established guidelines to get through it.

- 1) Figure out what's causing the reaction - is it a food, chemical, dust,

plant, animal, etc.?

- 2) Get the cause away from your body!
 - (a) if environmental - leave the place where the offending item is located. Get some fresh air into your lungs. Do not let the lethargy of the reaction itself stop you from leaving.
 - (b) if food - induce vomiting if the meal was very recent, or take a laxative (use one or both of these: plain, unflavored, uncolored milk of magnesia and/or sodium bicarbonate) to get it out of your digestive system.
 - (c) if in doubt - get back on the track by clearing your system. Retire to your safe-haven-room at home, and either fast, drinking adequate amounts of tolerated water, or eat only foods known safe by previous repeated tests on rotation, until you have stopped the reaction. Do not test new items when you are still reacting to something else.
- 3) Take sodium bicarbonate (baking soda) or alkali salts (2:1 mixture of sodium bicarbonate and potassium bicarbonate). The dose should be 1 to 2 teaspoons in a full glass of water followed by another glass of water. This should help alleviate the symptoms of an acute reaction, and the higher doses also have a laxative effect. This Is Not A Treatment To Be Used Daily, and the patient should not take this dose more often than 2 times in a 24-hour period. Once the offenders have been diagnosed and eliminated, the salts are valuable for the occasional unintentional reaction or test reaction.
- 4) Consult your doctor if the reaction is too severe or uncomfortable and requires medical attention.
- 5) Hang On! You will get over it. You are having an acute reaction which, once triggered, can go on and off for a number of hours or even several days, even after the causative agent is gotten out of the body. But, it will end! Now that you know what caused it, you have the chance to avoid that item in the future, and thus avoid chronic symptoms that you might otherwise have to suffer by continuing exposure.

Do not use a reaction as an excuse to binge or cheat, thinking "it's all ruined for today anyway". It is likely that your craving for something good to eat is just another symptom, set off as part of your reaction to the original offending food, chemical, or other substance. Fight the impulse to binge - treat it as an acute reaction (see above), and fast if necessary.

Controlling your ecological illness can be a challenge. Above all, it requires that you have patience and persistence. Your goal is to buy your body the time it needs to heal itself while avoiding chronic and acute reactions. Especially during the first weeks and months on diagnosis and treatment, however, you may find yourself having very strong acute reactions to offending environmental and dietary factors. You may even think you are sicker on this program than you were off it. Do not be discouraged - you are just being diagnosed. Use what your body is telling you from those acute reactions to eliminate the causes from your life. Only then - after you have found a diet and environment that does not cause chronic or acute reactions - are you truly on ecological treatment and in the best position to benefit from its approach. Whereas untreated ecological illness usually leads to an increasing degree of sensitivity and worsening symptoms, effective treatment favors a decreasing degree of sensitivity, and recovery.

Accept the fact that you have ecological illness and that your body may make it difficult or even impossible for you to do certain things. Then, accepting yourself as is, never let the illness stop you from at least trying to do something you want to do. Find out your true limits by doing, testing, re-testing, trying again - not by quitting or withdrawing from your life. Socialize with your friends, but take your own food and water with you when you need it, and be firm but good-natured about your health needs. People will take their cue from you as to their response to your new ecologic lifestyle; and they will accept it if you behave comfortably yourself about what you have to do to stay well.

One of the hardest but most important ideas for patients and their families to understand is that adverse reactions to foods and chemicals can cause psychological and behavioural disturbances. Irritability, anxiety, lethargy, sleepiness, depression, or paranoia can be symptoms of ecological illness; and when they are, they are reversible under effective ecologic treatment. Ecologic reactions can cause biological malfunctions in almost any tissue of the body, including the brain. The type of symptoms that occur depend on what functions the affected tissue normally controls. Thus, when the lung malfunctions during an ecologic reaction, as in asthma, the person cannot breathe normally. By the same token, when the brain malfunctions during an ecologic reaction, the person cannot behave normally; the abnormal biology of his brain that is caused by a

food or chemical reaction predisposes the person to have mental or emotional disturbances. For example, some ecological patients bruise "spontaneously" without even being bumped, just as others become "spontaneously" depressed or irritable without apparent reason in their life circumstances. These are not "spontaneous" symptoms at all - bruises as well as depressions or irritability can be symptoms of adverse reactions to specific environmental stressors, but the triggering stress is biological rather than psychological in nature. For instance, white potato or natural gas heat alone may have added enough to the patient's total load to cause depression or irritability even without a minor criticism from a well-intentioned spouse or relative. Once the biological stressors of offending foods and chemicals are brought under control, then the patient and his or her family can begin to deal with whatever is left of any undesirable personality traits and behaviors.

Finally, remember that ecological treatment is a rebuilding and a healing process. You are not trying merely to hold your ground against a progressing chronic illness of unknown origin. Rather, you as an ecology patient are trying to turn it around and reverse as much of the illness as possible while stopping its progress. You have the tools and the knowledge to help yourself, with the guidance and support of your doctor. Let's get to it!!!

* * *

PARJ TWO: excerpted from 'A Consumer Guide For The Chemically Sensitive'
(Foreword)

Immune System Dysregulation & Chemical Sensitivity

by Debra Lynn Dadd

and Alan S. Levin, M.D.

(The following article has been slightly edited for length):

Chemical sensitivity is an illness involving intolerance of certain chemicals found in the everyday environment. It is often referred to as a new type of allergy, and is popularly known by a variety of names: environmental illness, ecologic(al) illness, immuno-toxic syndrome, total allergy syndrome, cerebral allergy or bioecologic illness. Doctors who treat this disorder practice Environmental Medicine, Clinical Ecology, Ecologic Medicine or Bioecologic Medicine.

Many physicians argue that chemical sensitivities are not an allergy at all, because reactions are not mediated by the same system that causes traditional allergic reactions to pollens, dust, animal dander, and molds. Technically they are correct; we now know that chemical sensitivities are the result of a different malfunction of the immune system, recognized as a new and distinct disorder known as "immune system dysregulation".

The traditional concept of allergy associates only a few specific symptoms with a limited number of natural inhalants. In immune system dysregulation, the immune system similarly loses its ability to suppress unnecessary reactions, yet a much wider range of complex symptoms results, involving a variety of organ systems. Furthermore, these responses occur to a greater number of substances, including certain toxic chemicals as well as foods and natural inhalants. The most extreme manifestation of immune system dysregulation is universal reactivity to everything in the external environment, and even to the body's own tissues and organs.

A substance can provoke any one or more of a number of symptoms in an individual, including traditional "allergic" nasal stuffiness, wheezing, sneezing, asthma, chronic sore throat, postnasal drip, laryngitis, itching eyes, hives, and rashes. In addition, gastrointestinal disturbances such as gastric irritation, bloating, intermittent constipation or diarrhea, hemorrhoids, or anal bleeding may occur. Musculoskeletal aches, pains, or twitching, and arthritis or rheumatism are some other common reactions, as well as problems in a host of other body systems, such as frequent or painful urination, menstrual cramps, body or breath odors, metallic aftertaste, sensitivity to light, visual disturbances, and ringing in the ears.

The most surprising and dramatic documented environmentally-induced symptoms by far are the cerebral and behavioral reactions. These include migraine headaches, fatigue, dizziness, learning disabilities, confusion, inability to concentrate, lack of motivation, memory loss, and dyslexia. Personality changes, mood swings, hyperactivity and depression are also common.

Immune system dysregulation can develop over a long period of time due to repeated infectious diseases, continuous stress, and/or cumulative exposures to toxic chemicals, even at the low levels found in our everyday environment. It can also be triggered by a single serious viral infection, major stress, or massive chemical exposure.

Immune system dysregulation often remains undiagnosed, however, because many physicians, faced with its incredible array of seemingly unrelated symptoms, and unfamiliar with the available diagnostic methods, misdiagnose it as "stress", "psychosomatic disease", or the like. The medications commonly prescribed for these problems may suppress the symptoms to some extent, but often further aggravate the problem without dealing with the underlying disease process at all.

It is important to comprehend how the immune system works in order to understand how a simple malfunction can lead to such complex reactivity and symptomatology. The immune system is the body's basic defense against disease, providing protection by recognizing dangerous bacteria or viruses which enter the body and rendering them harmless. It works mainly through three kinds of white blood cells: B cells from the bone marrow, T cells from the thymus, and macrophages from the bone marrow and spleen.

B cells produce antibodies, proteins which circulate in the bloodstream, locating and identifying foreign substances, which are called antigens. When an antigen enters the body, B cells spring into action, and produce specific antibodies which attach to the antigens to form immune complexes. B cells are capable of producing a broad range of specific antibodies which identify and bind not only to disease producing viruses and fungi, but to non-disease producing antigens as well. B cells are always ready to respond to foreign substances: left to function on their own, they would continuously and indiscriminately produce antibodies to all antigens, whether harmless or dangerous.

T cells control the B cells. When a harmless substance enters the body, the T cells signal the B cells to suppress antibody production, yet when a dangerous substance enters and must be eliminated, the T cells allow antibody production, at a controlled rate and only until no more are needed. T cells can be programmed through vaccination or immunization to allow antibody production to previously unfamiliar but harmful antigens such as smallpox or polio. Conversely, allergy shots or other immunostimulation techniques can program T cells to recognize harmless antigens and to suppress production of their antibodies.

The macrophages filter the immune complexes (formed by the combination of foreign antigens with antibodies from the B cells) from the blood and digest them into their component parts: proteins, carbohydrates, and lipids. These components can then either be utilized as nutrients or eliminated through the kidneys or gastrointestinal tract. The inherent capacity of the macrophage system for processing immune complexes varies among different individuals, and is determined by heredity.

This same immune system mechanism which protects the body from disease can, when malfunctioning, cause a broad range of symptoms in reaction to a number of harmless or even beneficial substances entering the body. This malfunction commonly originates when the T cells are damaged by toxic chemicals, stress, and/or infectious disease. When the normal complement of T cells is reduced in number, or when their ability to function is impaired, they can no longer adequately control B cell production of antibodies. Without this control, the B cells cannot distinguish harmless dust, pollen, or animal hair, or vital and nutritious foods, from toxic chemicals or life threatening bacteria or viruses. They react by producing antibodies to all foreign substances indiscriminately at an uncontrolled rate. Sometimes even autoantibodies, which are antibodies directed against the body's own tissues, are produced.

Unlimited antibody production leads to the formation of larger quantities of immune complexes than the macrophages can process. When the macrophages become overloaded, the excess immune complexes are discharged into the bloodstream. These circulating immune complexes can then cause symptoms in any part of the body fed by an artery or capillary.

This disease process can be effectively reversed by protecting the T cells from stressful factors, allowing them to regenerate naturally and resume their normal regulatory function. The most effective way to accomplish this is a comprehensive reduction of all possible stresses on the immune system, both physiological and psychological. The actual healing process from immune system dysregulation is long, slow, and punctuated by exasperating short-term setbacks. These setbacks are inevitable, as the healing process invariably follows a "roller coaster" pattern. The frequency, duration, and severity of setbacks gradually diminishes until symptoms are mild and occur only occasionally.

After recovery has begun, an individual will often begin to notice adverse reactions to substances which previously caused no problems, such as diesel fumes, air pollution, or fabric finishes. This phenomenon, known as "unmasking", occurs when the elimination of dominant exposures allows underlying sensitivities to become temporarily more acute. This is to be expected; though it is sometimes perceived as an increase of symptoms or severity of the disease, it is, in fact, an indication of improvement.

Another aspect of the healing process is the experience of withdrawal from previously unrecognized addictions. As in any traditional addiction, the feeling of well being is maintained only through continual re-exposure to the addicting agent. Upon avoidance, this feeling of well being gives way to various symptoms, some of which may be rather severe. This withdrawal may be experienced from a remarkably wide variety of substances, including coffee, tobacco, alcoholic beverages, many foods, and even some common chemicals. It is not uncommon for instance, to find an individual who is "addicted to his work": the painter who "feels miserable" on weekends, or the printer who stays drunk all during his vacation. Generally, however, withdrawal symptoms last for only three to five days and then, if the individual can avoid succumbing to temptation, the symptoms are relieved. After having abstained for long periods, a formerly addicted individual will usually have immediate and severe symptoms upon re-exposure to the addicting agent, whether it be paint, cigarettes, or wheat.

Rebuilding the immune system and regaining tolerance to chemicals and other substances in the environment is a gradual process which may take one or two years. During this time, avoidance of disease causing agents and stress are crucial, but perhaps the most important requisite for recovery is avoidance of

the toxic chemicals found in the everyday environment. Even the elimination of a single significant chemical exposure (e.g. gas heat, smoking, or perfume) may immediately reduce symptoms and allow the healing process to begin, but it is the continuous protection of the immune system from chemical exposures of all kinds which will allow tolerance and health to be regained. Remember, however, that once the immune system has been damaged, it will always remain vulnerable. Regardless of the level of tolerance achieved, chemically sensitive individuals should continue to minimize chemical exposures throughout their lives.

Once health is restored, occasional chemical exposures can be tolerated, given an overall nontoxic lifestyle. The proper balance must be maintained between these greater exposures and a generally low baseline of exposure, so that the immune system is not overloaded to the point of malfunctioning. For instance, if you must live in the city and work in a toxic, poorly ventilated office environment, you should spend as many breaks and lunch periods as possible away from smoke-filled coffee rooms and outside in clean air - in a park, on a roof garden, anywhere you can breathe fresh outdoor air. You should also live in as clean a house and location as possible, and leave the city for unpolluted air whenever you can. If you suffer a major exposure, such as being trapped behind a diesel truck in a traffic jam for an extended period, you may require several hours at the beach breathing clean air.

It is very likely that many individuals are needlessly suffering from immune system dysregulation, without knowing about the disease or its symptoms. Because anyone is susceptible to this illness, it is beneficial for everyone to minimize exposure to toxic chemicals.

- 1) *Biological Evidence of Immune Suppression as Induced by Genetic, Therapeutic and Environmental Factors*, Van Nostrand Reinhold Co., 135 West 50th Street, New York, N.Y. 10020
- 2) *Inadvertent Modification of the Immune Response: The Effects of Foods, Drugs, and Environmental Contaminants*, Proc. F.D.A., 4th Science Symposium, Aug. '78
- 3) *Assessment of Environmental Contaminant-Induced Lymphocyte Dysfunction*, L.D. Loose, *Environmental Health Perspectives* 39 105-128, 1981
- 4) *Environmental Chemical Induced Macrophage Dysfunction*, L.D. Loose, J.B. Silkworth, J. Charbonneau and J. Blumenstock, *Environmental Health Perspectives* 39 79-91, 1981

* * *

Editor's Notes:

Environmental Medicine - Our New Columnists

The United States' Society for Clinical Ecology has undergone a change of name. The American Academy of Environmental Medicine, as it is now known, will become more and more familiar to our readers as time goes on. We are grateful to its members; not only for their ongoing research and documentation, but for the willingness with which they share their knowledge; educating physicians and patients alike.

PARJ ONE: Maladaptation To Chemicals was excerpted from the longer 'Ecological Illness: Maladaptation To The Environment', written by Doctors W.J. Rea, R.M. Stroud, R.E. Smiley and D.E. Sprague, and published by The Environmental Health Center, Suite 205 - 8345 Walnut Hill Lane, Dallas, Texas, U.S.A. 75231. In a future edition of your Quarterly, we will reprint the Introduction and opening section entitled 'Maladaptation and Addiction to Food'. Our thanks to Dr. William Rea for his permission, expertise, and ongoing encouragement.

PARJ TWO: Immune System Dysregulation & Chemical Sensitivity was first published as the Foreword to 'A Consumer Guide For The Chemically Sensitive', which is no longer in print. Happily, it has been replaced by two new and up-to-date books by the same authors, Debra Lynn Dadd and Alan S. Levin, M.D.

The Type 1/Type 2 Allergy Relief Program by Alan S. Levin, M.D. and Marla Zellerback is a 228 page paperback, published by J.P. Tarcher. It provides an overview of the differences between traditional allergy and environmental illness, with an emphasis on available treatment methods.

Nontoxic & Natural: How To Avoid Dangerous Everyday Products And Buy Or Make Safe Ones, by Debra Lynn Dadd, is a 289 page paperback (also published by J.P. Tarcher) that has already become my constant companion. You'll learn more about Debra Lynn Dadd, her book, and her latest venture, 'The Nontoxic & Natural Newsletter', in our Allergy Workshop feature (see pages 33 to 35).

All articles and excerpts are reprinted with permission from the authors.

Hello from H.E.F. Members in Nova Scotia!

The H.E.F. Quarterly is a vital link for many of us, and very much cherished by those of us so far away from a Clinical Ecologist and a clinic.

We are alive, well and working very hard here to educate the public and members of the medical profession about Ecological Illness, and I feel we have made great strides in this past year in particular. The future looks brighter every day for each of us, and there will be more believers in the years to come.

Looking forward to keeping in touch with you and any of your members who care to write or call if visiting our province.

Sending along a pamphlet to inform you of our good fortune in having a visit and talk by Dr. William J. Rea on April 6 (in the Rosario Centre, Mount St. Vincent University), sponsored by the Allergy & Environmental Sensitivity Society. Maybe we'll even have a clinic of our own!

Yours truly,

Betty Wuerr, R.N.,

89 Shore Drive,

Bedford, N. S.

B4A 2C7

Phone: 902-835-6073

Happy Summer from Winnipeg, Manitoba:

A new group called The Allergy Support Organization of Manitoba believes communication on illness effects is a key element in helping patients, and wants to create contact between allergy sufferers in Manitoba. The year-old association meets at St. Boniface General Hospital School of Nursing at 2 PM every third Thursday of the month, and everyone is welcome.

Happily, we have several clinics in Winnipeg, but they're so busy that it's difficult for newly aware allergic patients to get first appointments, let alone the treatment they need. With no H.E.F. Branch of our own, we too rely on the Quarterly to provide a free flow of information and support between ourselves, and patients and physicians elsewhere.

Special "thanks for Being" to the dynamic duo of Joyce and Jackie Sowiak, two generations of quick grins and helpful information that make Vita Health at 102 Osborne Street South, an "unofficial" support group/meeting place.

A Winnipeg member wonders if there is a market for 100% cotton toys (cover and stuffing), e.g. clowns, dolls, animals, etc.

Mary Merlin Nelson - Editor,
HEF Canada Quarterly,
261 Campbell Street,
Winnipeg, Manitoba.
R3N 1B4

Report of the Kitchener Branch of H.E.F.

Our branch has been organized six years, and we have 161 members. This past year (Fall, 1984) we had three seminars:

- (1) Dr. John MacLennan - "The 20th Century Disease";
Richard Tunsdale (one of the research students who had worked on our grant) - "Relaxation Techniques".
- (2) Dr. Donald Bastedo - "Food and Chemical Sensitivities";
G. Joy Underwood - "The Rotary Diet".
- (3) Dr. John Blair - "Allergies, Stress and Yeast";
Shirley Smith - "Coping Techniques, and Social and Psychological Effects of Environmental Illness";
Richard Tunsdale divided the audience into about twelve groups and gave them two topics to discuss.

In February we had a program with Mrs. Shirley Mertens (our past president) presenting "Indoor Air Pollution in the Home, School and Workplace", and one of our members spoke about various ways to filter air in the home. Then, at our Annual Meeting, Dr. W. H. van Hoogenhuize of Niagara Falls spoke about Candida Albicans and Phenolic Compounds.

We are pleased to announce that the first ecologically-safe classroom for environmentally-ill high school students will be operating under the Waterloo County Board of Education at Kitchener-Waterloo Collegiate in September. It is being constructed now and should be completed by June, giving it time to "gas-off" over the summer. It will have an electric heat air system with an air exchanger. Our hats are off to the Waterloo County Board of Education! We deeply appreciate their concern for the environmentally-ill students. We are looking forward to the time when elementary school students will have the same privilege.

continued on page 28

ECOLOGICAL ILLNESS AND THE LAW

A NOTE from Earon S. Davis, J.D., M.P.H.

Ecological illness is not just a medical problem. We need lawyers who understand this illness and are willing and able to do the work required for the proper preparation and presentation of your patients' cases. Given the very dispersed knowledge base and the lack of any legal counterpart to the American Academy of Environmental Medicine, your participation in this area will largely determine how many years it will take before the rights of the ecologically ill and the environmental physician are finally vindicated and fully recognized. (from *The Legal Side Of Ecological Illness*, October 1984)

The Future Of Formaldehyde In An Increasingly Polluted World

(A SPEECH presented to the consumer-industry-government forum on 'The Future of Formaldehyde In Consumer Products'; organized by the Consumer Federation of America, and held at the Washington Plaza Hotel, Washington, D.C., on November 16, 1984. Dr. Davis was asked to represent "consumers'" concerns, focusing on chemically induced hypersensitivity and its victims.)

Over the past ten years I have spent a good deal of time studying and evaluating the manner in which numerous chemical substances, whether product or by-product, bring industry, government and consumers into contact with the legal

system. Combining my interest and training in law and public health, I have served state government, Federal government, private consultants and public interest organizations. As the first Executive Director of the Human Ecology Action League, I came into contact with thousands of chemical victims; people who have fallen between the cracks of our legal system, between the cracks of corporate responsibility, government programs, and even public interest advocacy.

The victims of system chemical poisoning may be represented by shoe-string organizations with silly sounding names such as S.U.F.F.E.R., C.U.R.E., and H.E.A.L., but these groups are steadily growing in size and sophistication, with increasing input professionals and a rapidly spreading credibility, both within the "activist" community and the public at large. You can now read of chemical susceptibilities in almost every mass circulation newspaper and magazine in the nation.

Through my experiences with H.E.A.L. and S.U.F.F.E.R. members, and with the Ecological Illness Law Report, I learned of tens of thousands of chemical victims, working quietly for their rights, bearing neglect and even ridicule, and waiting for their turn. Imagine what would happen if a larger percentage of these victims started turning to the courts. Right now, only a few percent actually go so far as to seek legal assistance. With the increasing specialization of physicians and attorneys in this area, this number will be increasing drastically over the next 5 years.

As evidence of the growing interest in this area, I should note that the past two months have seen a 50% increase in applications for listing in the EILR referral service, jumping from 100 attorneys nation-wide to over 150. (By March, 1985, the number had reached 180: MNW) In addition, there has been a steady flow of chemical victims seeking lawyer referrals.

If there is one overall statement that sums up my experience in the environmental, occupational, and consumer health fields, it is that we, as a society, have allowed such totally irresponsible uses of toxic chemicals that we may be facing a literal plague of chemically induced illnesses over the next 40 years. And it is my feeling that cancer may, indeed, represent only a small part of that plague.

Chemical damage to the human immune system appears to be increasing at an alarming rate, resulting in neurological disorders, neuropsychiatric illness, autoimmune diseases, and allergies and other sensitivities which are disabling a large portion of our workforce and are decreasing the productivity and quality of life for many others. Remember, we are not just talking about a healthy population of adult workers. We are talking about infants, the elderly, pregnant and lactating women, and those already suffering from other disease processes. Up to now, the formaldehyde industry, as other chemical industry sectors, continues to succeed in shifting the burden of proof from those who cause the chemical exposure to government regulators, and ultimately the consumer.

Those of us at this conference may need to be reminded that a lack of definitive proof has no bearing upon the question of whether a substance, indeed, does cause the damage alleged. The bodies begin piling up when the exposures begin, not merely when the scientific evidence is so overwhelming that even the tobacco industry would capitulate. And, believe me, the body count is high and rising. Formaldehyde is far from the only culprit. Pesticides, tobacco smoke constituents, solvents, and other multi-media pollutants, both indoors and outdoors, in cumulative and synergistic relationships, may eventually present serious health problems for 20 to 40% of the U.S. population according to some physicians.

Thus, the 2 or 3% figure sometimes quoted as the potential of formaldehyde hypersensitivities in our population, as large and incredibly costly as it is - is a gross understatement of the larger problem. One must consider the tens of thousands of significant chemical exposures in the workplace, at home, and in the neighbourhood. We don't even know how diverse and substantial the average person's exposures might be. And yet, the development of chemical sensitivities may be a progressive disease process, apparently spreading from one substance to another. With resulting total disability and enormous additional medical, housing, and food costs, the total costs may well bring our entire economy to its knees. It is relevant to point out that not just people die from toxic chemical poisoning. The asbestos industry has collapsed and is dying from mesothelioma and asbestosis; and let us pray that the tobacco industry shortly follows. And what about the UFF9 industry? Will other formaldehyde-related industries follow?

The answer may depend on your willingness to respond to the challenge of chemically induced hypersusceptibility and the other illnesses already associated with formaldehyde and other substances. Following are some of my suggestions:

1. Admit, publicly, that formaldehyde sensitization and non-specific sensitivities exist among the population of consumers as well as workers and assist governmental and public interest organizations in locating such individuals and providing them with information that will help them to secure the services and goods necessary to achieve the maximal quality of life available.

It is one thing to suffer from a known disease. However, the vast majority of ecologically ill individuals remain undiagnosed, probably increasing their health damage daily, unknowingly. Without widespread recognition of this illness, family, friends, and even physicians will continue to plague the chemical victim with innuendo that their bizarre symptoms are all in their head. Think of the emotional damage these experiences are causing. If nothing else, think of "punitive damages."

2. Set aside research funding, and seek the same from government, to study this phenomenon, develop diagnostic criteria, screening tests to identify victims in their early stages, and treatment modalities;

3. Set up chemically uncontaminated, "safe" communities in unpolluted areas to assist those who have become "universal reactors" with acute non-specific hypersensitivities which are incompatible with life in the twentieth century. Use these communities to ethically test various treatments and to provide the supportive environments necessary to those suffering from this frightening and isolating illness.

4. Get the government to fund basic medical research in this area as well as epidemiological studies to identify population groups at higher risk for developing chemically induced hypersusceptibilities and interventions which might be successful.

5. Assist public interest groups in their efforts to have the Social Security Administration, insurance companies, and workers compensation boards accept the diagnosis of "chemical hypersusceptibility" or "chemically induced immune dysregulation" as a compensable, disabling condition. Efforts should also be made

to remove other discriminatory obstacles preventing the environmentally disabled from living the good life. One of those obstacles is the contamination of public and commercial buildings by formaldehyde and pesticides. Standards should be set to require healthful environments in these buildings and to provide warning notices and other accommodations where this is not feasible.

6. Prod government into studying the larger chemical problem in our society, encompassing the environment, indoors and outdoors; consumer products, and the workplace. The formaldehyde industry is not responsible for all chemically induced illness in our nation. Scientific and public policy panels and study groups should be convened to determine strategies for learning the relative roles of various substances in causing these diseases and to set priorities for research and regulatory reform.

Following up on this last point, it must be noted that while most of those poisoned by chemicals and ending up with these ecological illnesses are hyper-susceptible to formaldehyde, perhaps formaldehyde is not always the causative agent, but merely a secondary effect. Without a willingness to admit that the problem exists and to fund adequate research, you might even get stuck with more than your fair share of the costs of this illness.

7. Along these same lines, it would seem to be in the interest of the formaldehyde industry to make sure that all similarly ubiquitous substances are subjected to the same increased scrutiny that formaldehyde is facing, including clinical research and follow-up studies on chemical poisoning victims.

8. Finally, common sense would dictate substantial efforts to reduce the public's exposure to unnecessary sources of formaldehyde. The formaldehyde industry should be in the forefront of efforts to curtail the smoking of tobacco products in public, efforts to end the excessive weatherization practices which turn homes, offices and businesses into gas chambers, and efforts to increase and enforce ventilation standards.

I am aware that my presentation has raised some basic issues and premises that will not be popular with this particular audience. However, you must be aware that something is very wrong with the way in which chemical hazards are being dealt with in this nation and around the world. The problems of chemical susceptibilities and chronic chemical poisoning are growing. The formaldehyde

industry stands to lose much by continuing its policy of ignoring the problems of chemical sensitivities in hopes that they will go away. With the increasing numbers and credibility of chemical victims and their advocates, it may be time to tap into a little enlightened self-interest. Thank you.

A Personal Comment: (EJLR Vol. 111, Nos. 1 & 2, January/April 1985)

As I sat there at the conference, listening to speaker after speaker talk about this and that rat study involving cancer, it struck me that these people were just playing the polite game of government v. industry. Industry is busy patting its own back, while government representatives congratulate them and encourage them to do more, if practicable. The consumer stands there shouting, and no one listens. The house is burning and government and industry representatives stand there politely discussing the technical specifications of the firefighting apparatus.

Millions of dollars are spent on non-human studies and no one wants to study the self-proclaimed formaldehyde victims. They are there. They would be glad to submit to all sorts of tests. But no one wants to know what is wrong with them. You see, the chemical victim is a sore spot, a constant reminder of untold problems, of untold pain and suffering, a pimple on the backside of Government and Industry.

* * *

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* Earon S. Davis, J.D., M.P.H., is the editor and publisher of The Ecological
* Illness Law Report (EJLR). The EJLR has a policy of sending complimentary
* copies to any attorney who might be interested, and invites attorneys from
* Canada to join the EJLR Lawyer Referral Service. For further information,
* or for subscriptions, write to The Ecological Illness Law Report, P. O.
* Box 1796, Evanston, Illinois, U.S.A. 60204-1796. (Ecologically ill patients
* requiring legal assistance are urged to contact EJLR's Referral Service for
* names of attorneys in their areas. MNW)
*

Three students worked hard over the 14 weeks of our Summer Canada Works Grant project, gathering information. Pam Nancarrow-Snow supervised them, as did our Executive. The actual completion of the project is still pending due in part to the sheer volume of detail that has to be edited and put together into a handbook. Also one of the students was herself environmentally-ill, and ran into problems. They are prepared to finish the project.

We are still presenting a Rotational Diet Series at the Rotary Centre in Kitchener. This is on-going on the last Tuesday of the month, except for July, August and September. Our lending library is still at my home - 644 Rockway Drive - and one of our projects for next year will be to put a similar library in the cities of Cambridge and Guelph.

Re the Medical Symposium - The Bottom Line:

Of the many doctors and professionals who were registered (at least 120?), 26 signed up to receive information on future conferences. 26 Doctors wanted to know more!

Our new Executive: President - Mrs. Nora Schallhorn; 1st Vice-President - Mrs. Harriet Speropoulos; Treasurer - Mr. Jack Patterson; Secretary - Mrs. Colleen Crowe; and Past President - Mrs. Anne Schreiter.

Yours truly,

Anne Schreiter,

Kitchener, Ontario.

N2G 3B4

Editor's Note: Many thanks to those who wrote. We'd like to hear from more members, 'specially in Manitoba, Saskatchewan, Alberta, B.C., the Atlantic Provinces, Quebec, Ontario ... did I miss anyone? 'CROSS TALK' is happy to pass letters on, as we did with Delta, B.C. member Heather Adler's response to Joy Spearman of Monetville, Ontario ("A Letter From A Mother" = H&F Canada Quarterly Vol. VII, No. 1). If you would like us to publish your name and address, tell us. If not, tell us that too. H&F does not make its mailing list available to commercial sources or members of the public. Your Quarterly follows the same guidelines. If confidentiality is requested, it is assured.

ALLERGY WORKSHOP

Diagnosing Fabric Allergies

by Mary Merlin Nelson

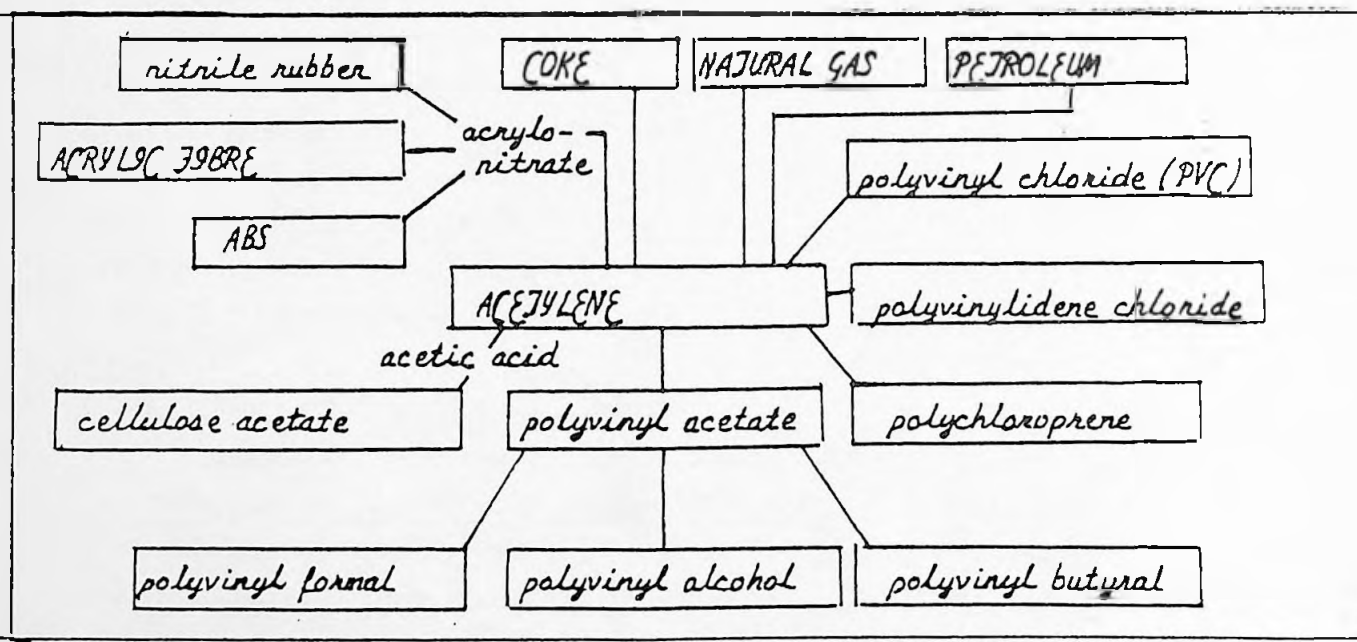
Don't like shopping? Ever wonder why? For the allergic consumer, the idea of a "fun day" is NOT to go downtown, windowshop, have lunch at a cute little cafe and/or catch a movie matinee. They all have one thing in common: a hostile environment. They all make us irritable, nauseous and headache-y; anxious, dizzy and "too hot"; peevish, respiratory distressed and absentminded. Even non-allergic people have begun to notice that they have some difficulty (e.g. itchy eyes and nasal passages) upon entering shopping malls or fabric and furniture stores. It is becoming more and more difficult for chemically sensitive people to manage the reactions brought on by fabrics: the hot, red, burning rash of dermatitis; the scaled and itchy rash of eczema; the swelling and itch of hives; sneezing, asthma and sinus problems; edema and/or anaphylaxis (ranging from loss of motor control to unconsciousness). The chemical content of today's fabrics, furnishings, curtains and carpets can add to the allergic person's total "chemical load" and produce reactions even in a previously stabilized individual, and can (in some instances) trigger hypersensitivity in a formerly "non-allergic" person.

Diagnosing fabric allergies is a lot like diagnosing food allergies. People are often allergic to all products related by one basic material, in the same way they are allergic to all members of a food family. (Chemically-related products that are widely used include pine tree resins (rayon) or petroleum based products such as plastic, acrylic, nylon and dacron. Because the people who suffer allergic reactions from chemicals need to know the source of

their allergen (so they can avoid the allergen, and another reaction as or more severe in the future); we're going to share a small organic chemistry lesson, and learn about Man-Made Fibres, which are divided into two basic categories:

- (1) Cellulosic Fibres (acetate and triacetate), made from wood pulp (cellulose); a fibrous substance to which acetic acid and a solvent are added. Cellulose-based fabrics are identified by their generic and/or trademark names: Acetate, Triacetate (Annel, Durafil, etc.), and Plyrosic (Viscose). There are many trademark names.
- (2) Non-cellulosic synthetics (polyester and polypropylene, for example), completely chemical fibres based on petroleum derivatives; are called synthetic fibres because they are synthesized from chemicals (their basic elements are oxygen, hydrogen and carbon; hydrocarbons), rather than derived from a substance already existing in nature; such as cellulose, cotton, wool, and so on. Non-cellulosic synthetics are also identified by chemical base and trademark: Nylon (polyamide, Antron, 501/N, fd nylon, Union Carbide, Qiana, etc.); Polyester (as a polycotton blend, Terylene, Trevira, Dacron, Fortrel, etc.); Acrylic (Orlon, Acrilan, Courtelle, Borg Pile, fake furs and velvets); Spandex (Lycra, Vyrere); Modacrylic (Dyrel); Olefine (propylene, polypropylene, Celaspun) and Saran. Again, there are many trademark names not listed.

In the same way that foods are related by biological families, chemicals have their own "Family Trees". Here's a common one:



Now imagine another "Family Tree" similar to the one you've just seen, with COKE (derived from coal) as its main root. Following the branches down and to each side; on one side, coke branches out (with steam/water/gas/synthesis gas/methanol) to FORMALDEHYDE, which twigs with phenol-formaldehyde, urea-formaldehyde and polyformaldehyde. On the other side, coke branches with lime. If you add calcium carbide and water, you get acetylene. Look back at the "core chemical" of the chart on page 30. Think about acetylene welding torches. If the calcium carbide branches to nitrogen instead of water, you get calcium cyanamide, then MELAMINE, which (linked with formaldehyde) becomes melamine-formaldehyde. The very same distillates from which benzene, toluene, naphthalene, and phenol are extracted; are the source from which styrene, polystyrene, nylon, and polyesters are created. There you have some excellent examples of how highly toxic (suspected carcinogenic) chemicals become an astonishing variety of textures and colors; beautiful but dangerous textiles and fabrics and vinyls that are inexpensive (because they're cheaply manufactured) and require virtually no care.

Synthetic fabrics have many advantages; strength and durability among them. They seldom "wear out" the way 100% cotton or 100% wool or 100% silk do. Perhaps that explains why so many people wear them, and furnish their homes with them. (Check your clothes closets and home furnishings, carpets and curtains, office environments and car interiors; read the labels, and you'll discover how widespread the use of petrochemical derivatives is, and the astonishing combinations that have become an integral part of our lives and environments. The benefits of synthetics are well known, but the benefit/risk ratio has another, darker side, seldom seen by a non-allergic consumer. For a chemically sensitive person, synthetic fibres and plastics can (and do) present only risks; there are no benefits whatever! Petrochemicals and their derivatives are, at best, unstable. The chemicals can break down for many reasons; temperature changes (e.g. automatic clothes dryer heat) have shown to be the most obvious reason. Body heat alone can cause a chemical breakdown that results in the "gassing off" of fumes, and the absorption by skin, of poisonous substances.

You must test for fabric allergies in the same way that you test for food and inhalent allergies; with concentration, dedication and curiosity. Once you have an understanding of what is in the fabric, you know what to look for. Even "natural fibres" (e.g. mercerized cotton) can be chemically treated in processing. These treatments include dyes, sizing, and other synthetic treatments such

as scotchguarding, sanitizing, perma-pressing, and mothproofing; all of which use a fairly standardized chemical base. Scotchguarding (using polyesters) and perma-pressing processes are based on formaldehyde. Mothproofing uses a form of pesticide. Sanitizing uses hexachlorophene and/or zinc phenolsulfonate. One study found that 112 fabrics with 39 types of composition had a formaldehyde content ranging from 1 to 3,000 parts per million. The most common cause of contact dermatitis (itchy skin) is from free formaldehyde used to manufacture durable press clothing. This is important to a patient known to be hypersensitive to formaldehyde. Remember, you don't have to wear them; you have only to sit in, on, or next to a fabric allergen, and breathe in, to cause a reaction. Trust your instincts. Trust your nose; your sense of smell. If something displeases you because "it doesn't smell right", avoid it. If it makes you feel dizzy or lightheaded; nauseous or clumsy; irritable or brain-fagged; get it out of your life and environment.

Diagnose your fabric allergies one at a time, beginning with the ones you are exposed to most. Learn what you can about the substances involved. As an example: Polyesters - include linear polyesters, unsaturated polyesters, alkyd resins; are a condensation of poly(many)functional acids with polyfunctional alcohols. Unsaturated polyesters are usually crosslinked with styrene, but other unsaturated compounds are sometimes used. Moderately priced; linear polyesters include Terylene, Dacron and Tergal. Reinforced polyesters are unsaturated. Linear polyesters are used in textile fibres, high quality films and audio recording tape. Unsaturated polyesters are used in glass-reinforced plastic mouldings for buildings and vehicles. Alkyd resins are used in paints. Polyester fibres burn readily, but because they are thermoplastic and thus tend to drip away from a burning fabric, they are not classed as highly flammable. However, in combination with cellulosic fibres, the polyester is prevented from dripping and becomes highly hazardous. Polyester, like other synthetic fabrics, is susceptible to breaking down by bleaching agents used in laundering, and to decomposition when heated (e.g. ironed).

For further assistance in diagnosing fabric allergies, I leave "the last words" to Debra Lynn Dadd, and excerpts from her new book, which you'll find on the next page. Good Luck! You CAN do it!

* * *

CLOTHING: (pg. 66) Dyes; formaldehyde finishes; pesticides (mothproofing); plastics (acrylic, nylon, polyester, PVC/polyvinyl chloride, spandex).

Safe Alternatives: Purchase clothing made from natural fibers and wash them before wearing to remove excess finishes and dyes. Switching to natural fibers will be a gradual process; as much as you might like to, you probably won't be able to discard your entire wardrobe and buy all new clothes. Start by sorting through your existing clothing to determine which of the pieces you already own are made from natural fibers. Wear these most often and next time you buy new clothes, look for natural fibers. Check descriptions carefully. Fabrics may contain finishes and dyes or be sewn with polyester thread or be finished with polyester zippers, elastic, trim, linings or interfacings.

TEXTILES: (pg. 192-193) Dyes; formaldehyde; phenol; plastics (acrylonitrile, nylon, polyester, polyethylene, polyurethane, polyvinyl chloride/vinyl chloride).

Since World War II, hundreds of synthetic "miracle" fibers have been developed and are now in popular use. Although little scientific evidence exists to conclusively prove that these fibers themselves are harmful, chemicals such as toxic phenol, carcinogenic vinyl chloride, and other harmful plastics that are used to make them may be absorbed by the skin. In addition to their potentially toxic effects, plastic fibers are not very comfortable. As a group, none absorb moisture very well, making you uncomfortably hot, sticky, and clammy in warm weather, providing an ideal environment for bacteria growth. They are also poor choices for winter wear, as they are not good conductors of heat.

Plastic fibers are also difficult to clean because they tend to absorb oil from the skin and hold oily stains that can be effectively removed only with specially developed synthetic detergents (which also pollute and cause health problems). "Static cling" is another problem unique to synthetic fibers, caused by an electric charge created by the friction of the synthetic fiber against the body. To solve this problem, even more synthetic chemicals are used in fabric softeners and antistatic agents.

Many textile products are treated with formaldehyde. Even if not stated on the label, all polyester/cotton blend fabrics have formaldehyde finishes.

- continues

Polyester/cotton bedsheets have a particularly heavy finish because of their continuous use and frequent laundering. Formaldehyde is also used on nylon fabrics to make them flameproof. Some pure cotton fabrics have been treated with formaldehyde finishes for easy care. Even though it is not required by law, clothing labels will usually reveal a finish that makes them "crease resistant", "permanent pressed", "durable pressed", "no-iron", "shrink proof", "stretch proof", "water repellent", "waterproof", or "permanently pleated", since these are qualities considered desirable to the consumer. These finishes combine formaldehyde resin directly with the fiber, making the formaldehyde irremovable. At the end of processing, new textile products often contain free formaldehyde levels of 800 ppm to 1000 ppm. Simple washing can lower these levels to 100 ppm, but formaldehyde continues to be released as the resin breaks down during washing, ironing and wear. Flame retardants are another problem, especially since most polyester fibers are treated with them.

Safe Alternatives: Use natural fibers and stuffing/insulation materials - cotton, linen, silk, all the various types of wool, down, feathers, kapok (a fiber taken from the seed pod of the tropical kapok, or silk-cotton tree), and natural-fiber blends: cotton/silk, linen/cotton, and wool/cotton (commonly known as Viyella). With the exception of the use of pesticides during growing periods, very few chemicals are used in the processing of natural fibers. Unlike synthetic fibers, where the only way to get rid of all the petrochemicals is to destroy the fiber itself, the finishes and dyes used in the processing of natural fibers can either be avoided or effectively removed.

FORMALDEHYDE: (pg. 238, Appendix One) Suspected human carcinogen. Has been related to teratogenic and mutagenic changes in bacteriological studies. The National Academy of Sciences estimates that 10 to 20 percent of the general population may be susceptible to the irritant properties of formaldehyde at extremely low concentrations. Symptoms from inhalation of vapors: cough, swelling of the throat, watery eyes, respiratory problems, throat irritation, headaches, rashes, tiredness, excessive thirst, nausea, nosebleeds, insomnia, disorientation, bronchoconstriction, and asthma attacks. Symptoms from ingestion: nausea, vomiting, clammy skin and other symptoms of shock, severe abdominal pain, internal bleeding, loss of ability to urinate, vertigo and coma, possible leading to death. Symptoms from skin contact: skin eruptions. Long-term exposure can cause allergic sensitization. A preliminary study speculates that formaldehyde may be a contrib-

-continues

uting factor in sudden infant death syndrome (SIDS).

FRAGRANCE: (pg. 238, Appendix One) "Fragrance" on a label can indicate the presence of up to 4000 separate ingredients that are not listed at all. Most or all of them are synthetic. Complaints to the FDA have included headaches, dizziness, rashes, skin discoloration, violent coughing and vomiting, and allergic skin irritation. Clinical observation by medical doctors has shown that fragrances can cause all types of central nervous system symptoms including depression, hyperactivity, irritability, inability to cope, and other behavioral changes.

PLASTICS: (pg. 241, Appendix One) All plastics present a problem with their "outgassing", a constant release of sometimes undetectable fumes, especially when heated. A good example of this outgassing effect occurs in new cars. That "new car smell" is caused by the outgassing of the plastic materials used in the interior of the car. You can see it as well as smell it, in the scum that forms on the inside of the windshield. In a study done by the National Aeronautics and Space Administration (NASA), polyester was found to be the synthetic material that released the most fumes.

Polyester can cause eye and respiratory-tract irritation and acute dermatitis.

Polyethylene is a suspected human carcinogen.

Polyurethane can cause bronchitis, coughing, skin and eye problems. It also releases toluene diisocyanate, which can produce severe pulmonary effects and sensitization.

Polyvinyl Chloride (PVC) releases Vinyl Chloride, especially when the product is new. Vinyl chloride is carcinogenic, mutagenic, and teratogenic, and can cause mucous membrane dryness, numbness of the fingers, stomach pains, hepatitis, indigestion, chronic bronchitis, ulcers, Raynaud's syndrome, and allergic skin reactions.

Tetrafluoroethylen ("Teflon") can be irritating to eyes, nose, and throat, and can cause breathing difficulty. Tetrafluoroethylene produces poisonous gases when burned and may also produce these gases to a lesser degree when heated.

* * *

Editor's Note:

ABOUT DEBRA LYNN DADD

In the January/April edition of the Ecological Illness Law Report, Aaron Davis described 'NONTOXIC & NATURAL' as "a major milestone in the movement against chemical contamination. A guide like this serves not only to help people find those relatively nontoxic products that exist, but by increasing demand for such products it helps to ensure that current nontoxic product lines are profitable and additional products are offered to the public."

To that, I can only add THIS IS A MUST READ BOOK! A 10. Four stars. I have two copies, and wouldn't part with either one. Debra Lynn Dadd has provided us with a book that is bound to be "the most exciting find of this year", and has followed it up with a brand new newsletter; appropriately entitled 'The Nontoxic & Natural Newsletter', an ongoing update on the book and on the world around us.

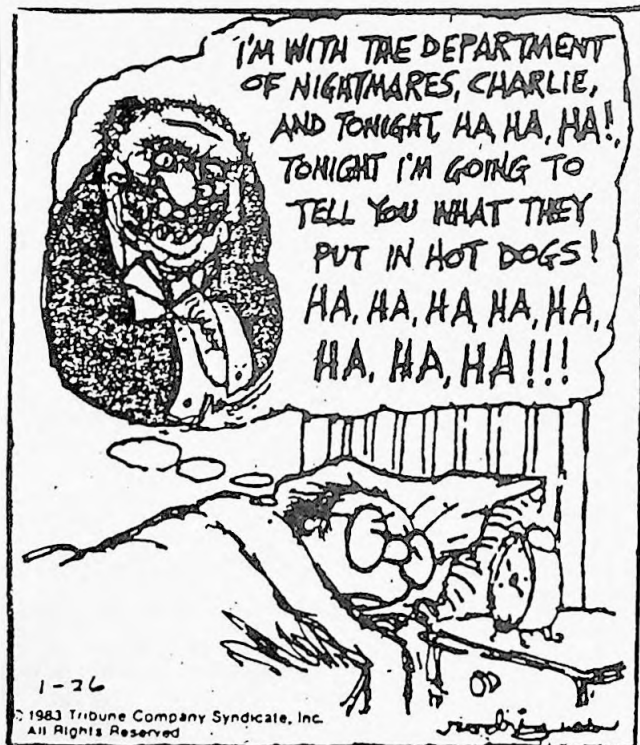
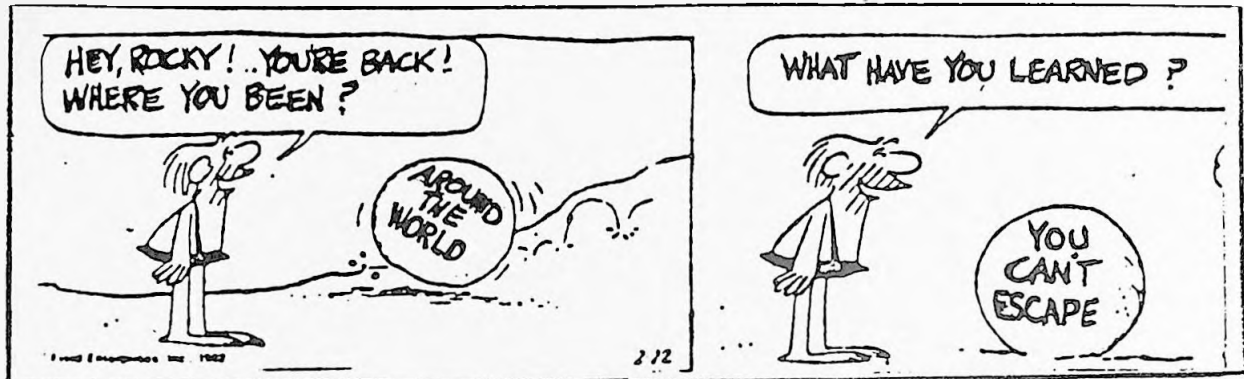
'NONTOXIC & NATURAL (A Guide For Consumers): How To Avoid Dangerous Everyday Products and Buy or Make Safe Ones' contains over 1200 brand name items rated for nontoxicity, including additive-free foods, unscented cosmetics, odorless office supplies, formaldehyde-free building materials, effective air and water filters, natural fiber items, safe cleaning products, nonpoisonous pesticides, and more. There are over 500 mail order sources, over 400 inexpensive, do-it-yourself formulas for everyday products, and if that's not enough to make you rush out to look for and purchase it; go back and re-read the excerpts on pages 33 to 35. That's the best Book Review I know of ... that, and the Preface to 'Nontoxic & Natural', which tells us that Debra Lynn Dadd herself is ecologically ill. In it, she says:

"Four years ago I didn't know a toxic chemical from a natural substance. I took aspirin for headaches, and I thought that pollution was something caused by industries the government was controlling."

"Before I began my research, I thought I was alone in reacting to so many things that seemed to be safe for everyone else - things such as tap water, gas heat, acrylic sweaters, perfume. Once I knew what to look for, I saw that many other people around me were also being affected, even if they hadn't yet made the connection."

'NONTOXIC & NATURAL' and 'The Nontoxic & Natural Newsletter' are available from Nontoxic Lifestyles, Inc., P.O. Box 210019, San Francisco, CA. USA 94121-0019. The former is \$9.95 plus \$1.50 shipping and handling (US Funds), the latter is

\$10.00 (US Funds) per year, and began with Vol. 1, No. 1 in January/February 1985. The book is available in Canada. I found a copy (reasonably priced at \$13.95 Canadian) in my favorite Vita Health store on Osborne South in Winnipeg. Vita Health is a national chain, so check the book shelves in your own cities. Excerpts from 'Nontoxic & Natural', the book and the newsletter, will appear in future editions of your HEF Canada Quarterly. All reprints and excerpts appear with the permission and cooperation of their author.



ALWAYS FIND A REASON TO SMILE... AND SHARE IT. MMM

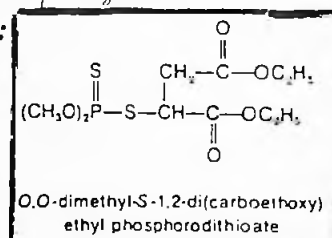
INDUSTRIAL PRODUCTS

Organophosphate Pesticides - Part Two by Douglas J. Steinke, BSc. (Envirochem)

- * Background: Winnipeg is the only major city in Canada (and perhaps all
* of North America) to carry out residential mosquito fogging. Although
* a pesticide link is feared in rising stillbirth statistics; despite the
* increasing number of protesters, and complaints of allergic reaction;
* and with mutterings of "there has been no adequate research, so we assume
* they're safe"; our "environmental protection" agencies disperse 169,200
* ounces of the pesticide MALATHION each time they fog the city (about half
* the city area is sprayed). At best, the spraying provides two day's relief
* from the pesky critters. In August of 1981, Manitoba spent \$2.5 million
* dousing the city with Baygon (propoxur), a chemical designed to stop normal
* chemical processes in the central nervous system, to halt "the risk of an
* encephalitis epidemic". Winnipeg has since received numerous sprayings
* of Malathion. With mosquito season on its way, our resident chemist takes
* a look at that particular organophosphate pesticide.

The American Cyanamid Company introduced Malathion to the market in 1950. It is widely used as a contact insecticide and acaricide (mosquitoes, aphids, red spiders, mites, leaf hoppers, thrips, etc.) on a wide range of vegetables and other crops. Its chemical formula is depicted in figure 1: It commonly appears in flea powders for dogs, cats, and other domestic animals, and is used in the control of cockroaches. It has been prescribed by physicians for use on humans for the control of head, body, and crab lice.

Malathion Figure 1:



In part one, (refer to Vol. VII, No. 1, pg. 39, Figure 11) we learned that malathion is rapidly activated by both insects and man to malaoxon and other inactive compounds. To actively synthesize the malaoxon product, the body removes the sulfur component of the malathion, and thus produces a highly potent anticholinesterase agent (refer to Vol. VII, No. 1, page 37) which is very toxic to both man and insect. Malaoxon (maloxanon) is detoxified to inactive compounds by a carboxylase enzyme which has coined the name of "saving enzyme". Vertebrates (such as humans) have a greater activity of the saving enzyme, compared to insects, so that the toxic compound builds up in insects and not in mammals. This selective buildup accounts for its specificity to be toxic to insects and not humans; although not all insects are affected by malathion, owing to a number of factors that selective toxicity depends on (e.g. balance of metabolic activation and deactivation processes occurring in a given insect).

In Winnipeg, spraying of malathion was conducted for a medical emergency situation in which an outbreak of Western Equine Encephalitis (a disease of horses and mules which is communicable to man) was to be halted. The disease process causes an inflammation of the brain and spinal cord by the virus which invades these areas. The virus is transported from horses and chickens to man, woman or child, by a species of mosquito; and Winnipeg, being on the low flat prairies, is an ideal breeding location for mosquitoes. In 1983, when Equine Encephalitis infected mosquitoes were at dangerously high levels, the Emergency Measures Organization (EMO) decided that aerial spraying was to be conducted on 17 municipalities and Winnipeg to reduce the risk of infection to humans. Malathion was sprayed over cities and towns in a concentration of 3 ounces per acre (below the mammalian toxicity levels of 1300 mg per kg for rats). Aircraft sprayed malathion at an ultra low volume droplet size which increases the kill incidence of mosquitoes and decreases the amount of pesticide used. The very small droplets kill the insect on contact, and increase the chances of actual "hits". The spraying achieved its goals of reducing the potential of an outbreak of Western Equine Encephalitis, but at what consequence to people who are sensitive to the compound?

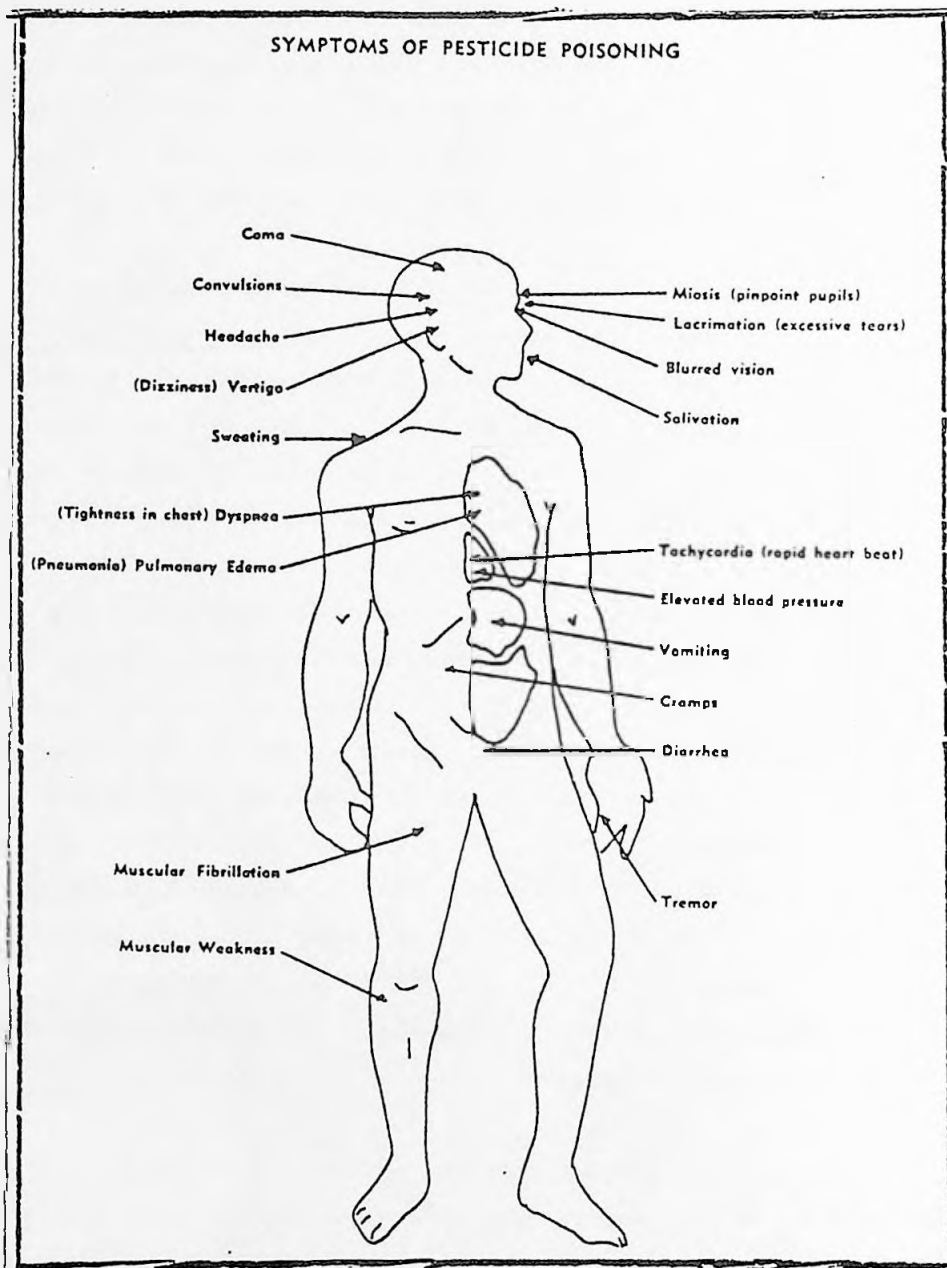
In 1983, as in other years, it was reported that there were many medical complaints which "may or may not" have stemmed from the malathion spraying, and further investigations are still being conducted in this area. (This translates to the denial of access to information on stillbirths, birth deformities, and

a wide range of "coincidental" hypersensitivity and/or allergy reactions. (MMN)
 From the information given on the physiological effects of organophosphates (see chart on this page, taken from "The New Pesticide User's Guide" by Bert Bohmont, published by Reston Publishing Company, Inc., Reston, Virginia, 1983), you may judge for yourself whether or not this drug is useful in our societies prevention of the spread of disease. Perhaps organophosphates are not one of the best pesticides to spread over the populus. We should go back to the old "swat-with-hand" method. It works for me.

* * *

Symptoms of
Pesticide
Poisoning:

Coma
 Convulsions
 Headache
 Dizziness
 Miosis
 Lacrimation
 Blurred Vision
 Salivation
 Sweating
 Dyspnea
 Pneumonia
 Tachycardia
 Elevated Blood
 Pressure
 Vomiting
 Cramps
 Diarrhea
 Muscular Weakness
 Muscular
 Fibrillation
 Tremor
 (Allergy?)
 (Asthma?)
 Stillbirths and
 Birth Defects?



*** E D 9 7 0 R 9 A L ***

Out Of Sight, Out Of Mind? Toxic Chemicals In The News

The Federal Government will surely forgive me for not being impressed by the news that Ottawa plans to spend \$1 million on a pesticide information program, and another \$720,000 on an "information secretariat" to tell the public what criteria Agriculture Canada was to decide whether a pesticide can obtain registration in our country. There are 600 active ingredients on the pesticide registry, according to our government's representatives. I wonder if they know there are over 1500 pesticides, herbicides, and fungicides; combined with some 2000 other toxic substances to make nearly 35,000 pesticide products? Inactive reductions were made in the Canadian Wildlife Service and other parts of Environment Canada, at the same time the headlines were reading "grievously deformed birds hatching - Chemical dumping suspected as cause of gross defects in waterfowl nestlings"; "Cannan (Manitoba) receives emergency water supply - toxic potato herbicide Dinoseb spilled upstream from water intake - tests show herbicide levels markedly exceed safe limits"; "Concerns linger in Hamilton over effects of (205 L drum of pesticide (cygon) spill - may cause cancer"; "Dye-cleaning solvent (perchloroethylene) in waters program says"; "A toxic PCB spill has occurred on a remote stretch of highway in Northern Ontario" ... living a mere 130 miles west of Kenora, on the same "remote stretch" of highway that runs through our cities and towns; knowing the convoy that passed through (under the watchful eyes of television cameras, news photographers, an R.C.M.P. escort and officials of our Ontario, Manitoba, and federal "environmental agencies") left behind some 450 litres of oil containing 42% PCB's, as well as 150 barrels of contaminated materials gathered after the 250 km (156 miles) spill; having between 65 and 80 preacclippings collected in just 10 days, relating to the PCB's alone ... and another 60 or 80 on methyl isocyanate, alachlor, chlordane, aldrin, polycyrate, Nemacur, Triflavin, 2,4,D, and 2,4,5-T; toluene, chloroform, choline; malathion, DDT, dioxin ... (as you can see, the subject SEES MY RAGE WP)... I wonder who, if anyone, believes our Environmental Officials and Ministers, their representatives or their departments anymore? There will not be a NEWS RELEASE action in this edition. I can't handle the stretch! Can you? The diabolical of wildlife scientists and environmentalists; reductions in research, including studies of the toxic effects of commonly used chemicals, insecticides, herbicides and

X fungicides on wildlife and vegetation; the herring gull program which raised the first alarm about dioxin pollution in the Great Lakes; information important to everyone, but specifically to the so-called "handful" of ecologically allergic and environmentally hypersensitive who are being greatly affected and further sickened by these very toxic chemicals ... GONE! Out of sight, out of mind?

"We have not inherited the earth from our fathers. We are borrowing it from our children." Never before, has that reminder meant more than it does today; faced, as we are, with collapsed ecosystems; dying forests, and fish disappearing from poisoned lakes; no birds or frogs on lily pads, singing Nature's song in the wilderness. What are we doing to our dear Planet Earth? Is this the way we're protecting our borrowed environment; killing it slowly, and destroying ourselves with it? Ecological illness is only part of the far-reaching and increasingly frightening indication that we're more of an Endangered Species than most of us realize, or want to admit. We must start paying more attention to what's happening all around us ... and DO SOMETHING about it!

Repeat after me: "I Am An Endangered Species" ... be aware of your environment and those who claim to protect it ... "there is no imminent danger" often translates into "I don't know what I'm talking about" ... GET MAD ... write letters ... raise a ruckus! Show them we're more than just a "handful of hypochondriacs" ... and we WON'T be put off by bafflelegab any longer.

Find out for yourself what's REALLY going on, and share what you find with your HEJ Quarterly. We're all in this together, and together we CAN make a difference!

Mary Merlin Nelson

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Guest Editorials Are Welcomed - Send your submission to:

HEJ CANADA QUARTERLY - JO THE EDITOR
261 Campbell Street
Winnipeg, Manitoba
CANADA R3N 1B4

ECOLOHOME

* Clean Air * Organic Food * Clean Water *

Shirley M. Smith, well-known to Quarterly readers as a former editor, has now opened a halfway house for the ecologically sensitive at Port Albert, Ontario. The home is open to families on vacation, or to individuals who need a safe place to detoxify. Located on a two acre plot in the sparsely populated hamlet of Port Albert, on the shore of Lake Huron (between Goderich and Kincardine), ECOLOHOMÉ consists of a house and a self-contained apartment with a private entrance and a deck facing the lake. Hardwood floors; 100% untreated cotton upholstery and draperies; 100% untreated cotton and wool bedding; the master and dormitory bedrooms sleep a family of five in the house, with accommodation available for a week or a weekend. Shirley is hoping that July and August bring people who want a place to vacation, but she's flexible. It's a good idea to make reservations as early as you can.

Among the services provided by ECOLOHOMÉ: Food and Accomodation (per person prices \$60 per day); Accomodation Only - Family (\$500 per week or \$160 per weekend); Lifestyle Counselling (\$20 per hour), and Tutoring in all academic subjects from kindergarten to grade 13 (fully qualified teachers, \$15 per hour). Outdoor activities include sailing, windsurfing, canoeing, swimming, hiking, camping, bird watching, and breathing air well-scrubbed by prevailing winds. (Clients are required to bring their own outdoor activity equipment, and their own pillows. Sounds like THE PERFECT PLACE, doesn't it. Reservations are essential. To make yours, contact:

Shirley M. Smith,
R.R. No. 3,
Goderich, Ontario,
N7A 3X9
Tel. (519) 529-7634

I'm sure all members join the H&J Quarterly in wishing ECOLOHOMÉ the best of luck and success, and RAINBOWS ALWAYS. Isn't it nice to know one person CAN make a difference. Congratulation and THANKS to Shirley M. Smith.

QUESTIONS AND ANSWERS

Q: Heather Adler, from Delta, B.C., wrote to ask about

- (1) Pros & Cons of the "dust-eater" electrostatic air filter in funnaces for chemically sensitive (e.g. ozone, negative ions, etc)?
- (2) Any feedback or suggestions on handling a "phone sensitivity"?

A: Speaking from my own experience? I have an electrostatic air cleaner in my sunroom/office, and a Philips C/A 90 ecologizer in the adjoining room, and four other rooms in my home. The latter was recommended by an environmental chemist at the University of Manitoba, and has certainly proved to be an effective little machine, particularly during a hazy period of my life that involved breaking down acrylic latex paint that I, unknowingly, had applied to these very walls that surround me. I swear by both machines, but for an authoritative answer, I referred to 'Nontoxic & Natural', by Debra Lynn Dadd. In 6 pages, I found a world of research concisely laid out: Activated Carbon, Mechanical, Electrostatic, Negative-Ion Generators and Ionizers, Brand Names (rated) and Mail Order Sources, along with a chart showing Comparisons Of Pollutants Removed By Air Filters:

	<u>A.C.</u>	<u>Mech.</u>	<u>N.I.G.</u>	<u>E.S.</u>
Particles (larger than .01 microns) e.g. asbestos, dust, pollen, mold, animal hair, tobacco-smoke particles:	No	Yes	No	Yes
Gases (smaller than .001 micron)				
Ammonia	Some	No	No	No
Carbon Monoxide	No	No	No	No
Formaldehyde	Some	No	No	No
Lead	Yes	No	No	No
Nitrogen oxide	Some	No	No	No
Pesticides	Yes	No	No	No
Phenol	Yes	No	No	No
Plastic emissions	Yes	No	No	No
Sulfur dioxide	Some	No	No	No
Tobacco-smoke gases	Yes	No	No	No
Other organic chemicals	Yes	No	No	No

A: Telephones? Never use them if I can help it. I consulted 'Nontoxic & Natural' on this one too:

Telephones: Plastic

Safe Alternatives: Use a speaker phone from several feet away. Use an old telephone. Most have metal or wood bases with receivers made of old outgassed Bakelite (phenol-formaldehyde resin) or hard natural rubber. If you can find a local dealer who specializes in old telephones, he may be able to make a metal receiver. Purchase a new phone made entirely of wood and metal with cloth cords. Use a small headset. Phones made of natural materials can be purchased at phone-center stores, telephone shops, or by mail. Ask your local telephone company representative.

Q: (Also from Heather Adler) Are you, in the east, being affected by the government intervention in restricting the sale of herbs, amino acids, etc.? Do you have a plan to fight back?

A: I'm passing your question on to our readers. Does anyone have an answer? Individual or organization, we'd like to hear from you. Health stores are urged to respond, along with their patrons. Send your letters to Questions And Answers, c/o The H&F Canada Quarterly, 261 Campbell Street, Winnipeg, Manitoba, R3N 1B4.

* * *

THE PATIENT'S PERSPECTIVE

"Thank Goodness For Choices"

by Wanda Wilson

As a patient with multiple sensitivities; one who has been labelled a "universal reactor", "brittle", "exquisitely sensitive"; life is full of challenges. Everyday living can be so overwhelming; sometimes downright tough! So many "I can't's". It seems to go on and on. Am I contented with living with environmental illness (ecological illness, 20th Century Disease) which ever label it goes under? Certainly not!! It's frustrating, it's tiring, it's sometimes life-threatening. It takes every ounce of my being to get through a day, but I do!

Life as an ecological patient is a lesson in choices. I can choose to recognize my limitations but I can also choose to recognize what I can do within my limitations. I choose to zero in on what I can do; not what I can't do. I can choose to recognize the total ecological management principles; the diet, the desensitization serums, making my environment as chemically free as possible (to the best of my ability) or just work on one or two of the principles. For me the first choice is necessary; it's a lot harder and takes more work, but no one said life was going to be easy. Even when following all of the above principles, there are still some days when I'd like to throw in the towel and give up. (I'm not sure whether this is a reaction or a very normal thing to feel; probably a bit of both.) I even have a choice in that, and I choose to carry on. Even the healthiest people do not experience 365 days of heaven!

I can either choose to take responsibility for my own health; become an active participant in discussing my treatment and follow the advice and guidance of the clinical ecologist, and hopefully through various experiences (some bad, some good) educate and make other professionals and lay people aware of this illness OR I can look for an instant cure, a magical pill that will make me better real fast!! Although I wish for my sake (as well as for others with this illness) that there would be a magical solution, I know there isn't. I choose to try to control this illness rather than having the illness control me. The end result is up to me. If I choose to cheat (I do occasionally) then I will suffer the consequences. There will be no one but myself to point a finger at. I can choose to decide whether it is worth it.

The most important choice for me (after the diagnosis was made) was to decide whether I would receive this as a challenge or a defeat in my life's

journey. Would I choose to seek out the negative and dark side of ecological illness, or seek out and implement creative alternatives and choices? While this illness is serious (and something that should not be looked upon as just being "something to live with"), I chose to find positive things coming from it. This illness has forced me to seek out creative alternatives for my life. I have met with and listened to many people who are ecologically ill. They have taught me some very valuable lessons. They are very special people!!!

For me, humor is very important. I'd rather laugh than cry (although I've cried a few times). I'd rather smile than frown! Some of my reactions are rather incredible. While serious at the time, when reminded of them later I sometimes laugh or smile and shake my head, wondering how I (and the people who helped me) ever got through it. But we did!! The support system of H.E.F. has been my lifesaver many times!! We all have experiences to share. We support each other, and that's so essential! The dedication and care given by my clinical ecologist and other health care professionals have literally saved my life many times.

While I can choose to complain about little things (or even big things), I rarely do. I choose to be thankful that I have caring friends, a support system such as H.E.F., clinical ecologists who care; a family who (although they sometimes don't understand what this illness is about) still support me, and are trying to learn more about it; a career which enables me to help others with environmental illness ... for me, the pluses outweigh the minuses.

As an ecological patient, it is important for me to dwell on my successes of each day, as well as acknowledge the struggles. I do believe that each of us has an inner strength which we aren't even aware we have. This strength appears when we need it most.

I still have a long way to go; I know there will still be reactions, and some rocky roads; but thank goodness I can still choose what I think will be the best for me. What about your choices????

* * *

Wanda Wilson is an E.C.E. Specialist, Certified Clinical Ecology Counsellor and Technician, and Toronto Branch member. Her letter (and its P.S.

"If I could be of any help, please drop me a line") is one more indication that the ecologically ill are Very Special People!

BRAVOS AND BOOS (Wherein we present Awards for DEEDS & DUDS)

Devotion Award

To Susan Daglish and The Allergy Information Association for their part in the new labelling laws (listing non-medicinal additives known to cause allergic reactions) going into effect this summer. BRAVO!

Enlightenment Award

To the Waterloo County Board of Education for its decision to create an environmentally-controlled 'sterile' classroom for the "ecologically ill" at Kitchener-Waterloo Collegiate in Ontario. (See CROSSJALK) BRAVO!

Enterprise Award

To Shirley M. Smith, former editor of the HEJ Quarterly, for her most recent accomplishment, the creation of ECOLDHOME. (See THE GOOD NEWS 95) BRAVO!

Determination Award

To the Honorable M.P. from Winnipeg-Bird's Hill, William (Bill) Blaikie, NDP Environment Critic, for "staying on the case" of Federal Environment Minister S. Blais-Grenier and others who are failing to protect our environment. BRAVO!

ALL TOGETHER NOW ... BRAVO, and thanks for your good DEEDs!
Where there are HEROES ... there are VILLAINS ... HESS, BOOOOOOOOO!

Deluded Award

To the Federal Environment Minister, Suzanne Blais-Grenier, for her cutbacks.

Uninformed Award

To former Ontario Environment Minister Morley Kells, for the PCB cleanup (?)

Deleterious Award

To the Nanaimo veterinarian who prescribes Proban (an organophosphate pesticide) as an oral medication, and propoxur (Baygon) as an aerosol spray and pet shampoo for dogs and cats with fleas. I'd love to invite you for lunch some day. Would you eat the chemicals you prescribe? BOOOOOOOOO!

BRAVOS AND BOOS welcomes nominations for our DEEDs and DUDs Awards.

PUBLICATIONS AVAILABLE FROM THE HUMAN ECOLOGY FOUNDATION OF CANADA

Note: The following publications can be ordered from H.E.F. Head Office,
 Prices include 46 Highway 8,
 Postage and Dundas, Ontario,
 Handling Charges L9H 4V9.

<u>Articles</u>	<u>Canada</u>	<u>U.S.A.</u>
"Allergy and Stress - Improving The Balance"	\$ 1.20	\$ 1.45
"Arthritis and Food Allergy"90	1.15
X "Clean, Potable, Tolerable Water"		
by Dr. John G. MacLennan90	1.15
"Clearing Out Pollutants In The Home"	1.00	1.25
X "Food Allergens In Alcohol"	1.00	1.25
"Herbicides: Special Hazards To The		
Chemically Sensitive"95	1.20
"Hidden Allergens In Modern Food"	1.00	1.25
"Hyperactivity And Its Many Causes"95	1.20
"Indoor Pollution: What People Can		
Be Sensitive To"	1.10	1.35
INFORMATION PACKAGE: "Pregnancy And The Newborn"		
by Dr. John MacLennan, Dr. Del Stigler	1.80	2.05
"Stigma And Allergies"		
by Shirley M. Smith	1.25	1.50
"The 'Step' Approach To Sorting Out Food		
Allergies" by Dr. John Blair	1.85	2.10

Books

Bell, Iris R. "Clinical Ecology: A New Medical Approach		
To Environmental Illness"	8.00	8.25
Crook, "Tracking Down Food Allergies"	9.75	11.00
Dickey, L. "Clinical Ecology"	63.25	66.75
HEF Canada "Common Sense For The Sensitive"	10.75	12.00
HEF Canada "Common Sense Cookbook For The		
Ecologically Sensitive"	18.00	20.00
Mandell, Marshall, "5 Day Allergy Relief System"	6.25	6.75

Randolph, Theron G., "Clinical Ecology"	\$ 21.70	\$ 23.70
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